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(54) **ALGAE-BLENDED COMPOSITIONS FOR THERMOPLASTIC ARTICLES**

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(52) **U.S. Cl.**  
USPC ..... **524/47; 524/17**

(58) **Field of Classification Search**  
USPC ..... 524/17, 47  
See application file for complete search history.

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(57) **ABSTRACT**

A thermoplastic material composition containing certain biodegradable and renewable components is described. The thermoplastic composition that includes a least one kind of algae or a blend of at least one kind of algae and a plant polymer a blend of algae and/or plant-based polymers, such as proteins and starches, as relatively low cost feedstock. The algae or blend may be plasticized. Additionally, a method adapted for large scale fabrication of fibers, films, or extruded articles is also described.

**34 Claims, 3 Drawing Sheets**